

# Intuicom® Nitro58™

## 802.11a 5GHz BROADBAND SOLUTIONS



### OVERVIEW

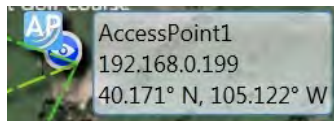
Intuicom continues its best-in-class tradition of wireless solutions with the Nitro58™ line of broadband products. At up to 108 Mbps, this advanced wireless 802.11a solution provides industry-leading 600mW transmit power, extended range, and the high throughput demanded by today's bandwidth intensive applications. The Intuicom Nitro58™ line also includes an industry first: automatic GPS-based geo-location of units through new BroadbandPro™ 2.0 software, available only from Intuicom. Other standard-setting features include an external status panel which combines Received Signal Strength Indicators (RSSI), power indicator, and a reset button.



External RSSI LEDs simplify antenna alignment. Reset button saves valuable time.

### NEW BROADBANDPRO™ 2.0 SOFTWARE

The all-new version of Intuicom's Broadband Pro software includes advanced mapping capabilities and industry firsts such as automatic GPS-based location and display, self-organizing network discovery, and more. All while maintaining the unsurpassed ease-of-use of previous versions.



GPS automatically maps network —no manual entry and always up-to-date



New Broadband Pro™ includes advanced mapping and self-organizing network discovery.

### KEY FEATURES

- Up to 108 Mbps
- 20+ mile range (LOS)
- 10/100/1000Mbps - Ethernet
- IEEE 802.3af/at PoE compliant
- Embedded GPS
- RSSI Indicators
- Reset Button
- IEEE 802.11a and Proprietary Wireless Protocol
- Orthogonal Frequency Division Multiplexing (OFDM) technology
- Single Unit Operation™ – any radio may be configured as an Access Point, Repeater, Remote, or Mesh Node
- Hardware Options: Integrated Panel Antenna, Stand Alone Enclosure and Access Point Cluster (Quad Radio)
- New, industry-leading software for simple set-up and operation
- Industrial Grade – IP67 and NEMA-exceeding environment specifications

### APPLICATIONS

- Traffic and ITS
- Security systems
- Video/surveillance monitoring
- High speed backbones
- T1/E1 replacement
- Mobile data and remote access
- Remote sensor data collection

To learn more about Intuicom Broadband Solutions and how to make your applications more robust and easy to manage, contact [broadband@intuicom.com](mailto:broadband@intuicom.com) or call 303-449-4330.



# Intuicom<sup>®</sup> Nitro58<sup>™</sup>

## 802.11a 5GHz BROADBAND SOLUTIONS

### GENERAL SPECIFICATIONS

	Integrated	Stand-Alone	Access Point Cluster
PoE Standard	IEEE 802.3af/at	IEEE 802.3af/at	IEEE 802.3at
Ethernet	10/100/1000Base-TX	10/100/1000Base-TX	10/100/1000Base-TX
Geolocation	Embedded GPS	Embedded GPS	Embedded GPS
Size	8.2" x 5.9" x 2.3"	11.0" x 9.7" x 4.7"	12.5" x 9.3" x 5.8"
Weight (TBD - Joe)	4.0 lbs.	4.0 lbs.	8.0 lbs.
LED Indicators	RSSI, Status, Power	RSSI, Status, Power	RSSI, Status, Power
Number of Radio Modules	1 RF module	1-2 RF modules	(4) Sector or (4) Panel
Antenna Included	Panel	n/a	(4) Sector or (4) Panel
Antenna Connector	n/a	(1-2) Type-N(F)	(4) Type-N(F)
Environmental	-45 to +85°C (IP67)	-45 to +85°C (IP67)	-45 to +85°C (IP67)

### WIRELESS INTERFACE

Wireless Protocols	IEEE 802.11a and Proprietary
Frequency Range	5.150 - 5.825GHz
Peak Transmit Power	28dBm
Data Rate	108Mbps
Receive Sensitivity	-97 to -74dBm
Channel Widths	5, 10, 20, 40MHz
Modulations	OFDM, BPSK, QPSK, 16QAM, 64QAM
Topology	Point-to-Point, Point-to-Multipoint, Mesh

### SECURITY

802.11i WPA-PSK  
802.11i WPA2-PSK  
802.11i WPA-EAP  
802.11i WPA2-EAP  
802.11i TKIP  
802.11i AES-CCM  
802.11i 802.1X  
802.11i -RSN  
Radius Authentication  
MAC Access Control List  
128/256 Encryption

### WIRELESS REGULATORY APPROVALS

FCC Part 15.247  
Industry Canada RSS-210  
RoHS Compliant

### BROADBAND PRO SOFTWARE

Advanced Mapping  
GPS Geolocation of Radios (an industry first)  
Self-Organizing Network Discovery and Display (and industry first)  
IP Discovery Tool  
Auto IP Conflict Resolution Help (an industry first)  
Local or Remote Configuration  
Network-Wide Diagnostics  
Bandwidth Test Tool  
Spectrum Analysis/AP Scan Tool  
Real-Time RSSI  
Client Connection Quality  
Audio Aiming Tool  
Configuration File Management

### IEEE NETWORKING FEATURES

802.11e	WMM and QOS
802.11h	DFX and TPC
802.1d	Ethernet Bridging
802.1p	Traffic Prioritization
802.1q	VLAN
802.1s	Spanning Tree
802.1w	Rapid Spanning Tree
802.3-1998	Ethernet
802.3ab	Gigabit Ethernet
802.3ac	Extended Frame Size for 802.1q & 802.1p Support
802.3ad	Link Aggregation/Port Bonding/Port Trunking
802.3i	10 Mbps Ethernet
802.3u	100 Mbps Ethernet and Auto-Negotiation
802.3x	Full Duplex and Flow Control

### PoE UNMANAGED SWITCH

(x4) 10/100/1000Base-T(X) PoE ports  
IEEE 802.3at/af PoE  
IEEE 802.3 for 10Base-T  
IEEE 802.3u for 100Base-T  
IEEE 802.3ab for 1000Base-T  
IEEE 802.3az (GREEN-Energy Efficient Ethernet)  
LED Indicators (Power, Fault, Status)  
Rigid IP-30 housing design  
DIN-Rail and wall mounting enabled  
Operating Temperature of -40 to +80°C  
Dimension of 1.03" x 3.74" x 5.68"

### ADDITIONAL NETWORKING FEATURES

Routing Standards (OSPF, BGP, RIP)  
FTP/TFTP, HTTP  
Telnet  
SSH Client  
SNMP v1,v2  
Syslog  
Firewall, NAT  
DHCP Server / Client / Relay

Note: Specifications subject to change without notice.  
© 2011 Intuicom, Inc. Revised 10/11.0

INTUICOM RADIOS REQUIRE PROFESSIONAL INSTALLATION

INTUICOM, INC.  
4900 NAUTILUS COURT STE. 100 • BOULDER, CO 80301 • USA  
T: 303-449-4330 • F: 303-449-4346  
Email: broadband@intuicom.com • www.intuicom.com

